Week 25 Bio Warmups

Listed below are the 5 statements about cells. Choose the term listed in parentheses that will correctly complete the sentence.

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| 1. | If a saltwater organism is placed into freshwater, the organism’s cells will gain water. This happens because the organism is in a (**hypertonic, hypotonic**) solution. |
| 2. | (**Active transport, Facilitated diffusion**) moves molecules from a low to a high concentration and requires energy. |
| 3. | In an isotonic solution, water (**does not move, moves in and out equally**). |
| 4. | The part of the cell that is made up of a lipid bilayer and protein channels is (**cell membrane, endoplasmic reticulum**). |
| 5. | Large amounts of liquid can be brought into a cell through a process called (**phagocytosis, pinocytosis**). |

Match each process with the correct description.

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| 1. | facilitated diffusion | a. | brings in large food particles |
| 2. | phagocytosis | b. | moves wastes out of the cell |
| 3. | endocytosis | c. | uses a protein channel to move particles from high to low through the cell membrane |
| 4. | pinocytosis | d. | type of active transport that brings materials into a cell |
| 5. | exocytosis | e. | brings in large quantities of liquid |

Match each description with the related term.

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| 1. | cell does not change | a. | diffusion |
| 2. | cell gains mass and swells | b. | active transport |
| 3. | cell loses mass and shrinks | c. | hypertonic solution |
| 4. | particles move from high to low without energy | d. | isotonic solution |
| 5. | particles move from low to high with energy | e. | hypotonic solution |

Describe 1 difference between each of the following processes.

1. Osmosis and diffusion
2. Phagocytosis and pinocytosis
3. Active transport and diffusion

Draw a picture of a cell in a hypertonic solution and explain what would happen to the cell.